

# Ball Aerospace/NASA New Horizons Mission to Pluto

## Featuring Ball Aerospace Ralph Camera

### Video Script 6/15 - w/42 Productions

VIDEO Products	AUDIO
Words on screen: <i>Agility to innovate...strength to deliver</i>	<b>Music Bed</b>
Deep Impact CRASH into the meteor HiRISE Hubble Spitzer WISE	<b>VOICEOVER:</b> Sometimes a voyage of exploration lasts only months. Other discoveries take a few years. But when you're going to the most distant worlds in our solar system it can take almost a decade. Hello Pluto!
Lower Third: Makenzie Lystrup, Ball Aerospace Planetary Astronomer	<b>Lystrup:</b> 9:36 – The thing is that nobody has ever been out to Pluto, right?...
Launch footage	<b>VOICEOVER:</b> New Horizons has been traveling to Pluto since 2006...
	<b>Lystrup:</b> - 9:55...so everything about this mission is going to be about not rewriting the textbooks but writing the textbooks.
Spacecraft build images	<b>VOICEOVER:</b> The New Horizons mission is anchored by the Southwest Research Institute for NASA.
Lower Third: Alan Stern, Principal Investigator	<b>Stern:</b> 1:30 - I hope it's remembered as the scientific mission that cracked open..and dwarf planets....
Photo images of Ralph camera/integration	<b>VOICEOVER:</b> The New Horizons camera system includes a remote-sensing instrument built by Ball Aerospace called RALPH.
Lower Third: Lisa Hardaway, Ball Aerospace Ralph Program Manager	<b>Hardaway:</b> 51:50- Ralph is a nod....planet.
Ralph camera and sensor images	<b>VOICEOVER:</b> Ball Aerospace began building Ralph in 2004 – with only 22 months to complete the science instrument.
Lower Third: Jim Baer, Ralph Optical Engineer Lead	<b>Baer:</b> 14:15 – 14:15 - We knew we could do it...we knew we could do it
Ralph photo images	<b>VOICEOVER:</b> Because the voyage to Pluto takes so long... Ralph had to be small, made out of light-weight aluminum with the power level of a night light.
Lower Third: Sharon Dixon, Ralph Electrical Engineering Lead	<b>Dixon:</b> 12:16...Think of it like a battery...use much power.
Ralph clean room images/rocket launch footage	<b>VOICEOVER:</b> The spacecraft is about the size of a grand piano, and began its journey strapped to the fastest rocket ever launched.....
Lower Third: Derek Sabatke, Ralph Optical Engineer	<b>Sabatke</b> 28:42 There was one moment I remember pretty dramatically the excitement of having slaved over this optical instrument....CUT...29:43...and then we ship the thing off and strap it to a firecracker.

	<b>Hardaway</b> - Itcleared the tower so fast it was through the clouds in 43 seconds....
Launch pad footage/NASA animation	<b>VOICEOVER:</b> That firecracker of a rocket needed to be fast in order to catch up with Jupiter in February 2007 for a gravity boost that would help it reach Pluto in just under 10 years.
	<b>Dixon:</b> 21:05..It’s just a sling shot out there....nine years now..  <b>Hardaway:</b> 52:14....Waiting nine years....long time  <b>Dixon</b> .....18:57 – 19:05...In the meantime my kids.....engineers.
Animation 1	<b>VOICEOVER:</b> The New Horizon mission is designed to study the surface composition, temperature and atmosphere of Pluto.
	<b>Hardaway:</b> 52:52 --- as we fly by the spacecraft will rotate and continue to take pictures as we leave.
Animation 2	<b>VOICEOVER:</b> We know so little about Pluto – that when New Horizons launched nine years ago we believed it had only one moon
Pad Footage/animation/graphic for cover	<b>Baer:</b> 0018:38 When we launched there was Pluto...Styx.
	<b>Lystrup:</b> 11:26 So we’re going to be learning not just answers to those questions but answers to questions we haven’t even thought to ask yet. end here
Final animation sequence	<b>VOICEOVER–</b> After a new early three billion mile journey – New Horizons is scheduled reach to fly by Pluto to capture the highest resolution images on July 14.
	<b>Stern:</b> 1:27 You know I’ve worked on this project in one form or another for 26 years....that’s a Christmas present...I can’t wait to open it in July..
Ball Logo	